

REMARKS

I. Introduction

Claims 3-27 are currently pending. Claims 3-7, 15-17 and 20-25 were withdrawn by the Examiner following Applicants election in response to a Restriction Requirement. Claim 27 has been added and is supported by original claims 1 and 2 and throughout the specification, for example in FIGs. 2 and 3. Claim 2 has been cancelled without prejudice. Claims 8, 10-14, 18 and 19 have been amended and now depend from claim 27.

No new matter has been added.

II. Claim Rejections under 35 U.S.C. § 102(b)

Claims 2, 11, 13, 14 and 18 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Yasuaki (JP 10-110887). Applicants respectfully disagree.

However, in an effort to expedite prosecution, independent claim 2 has been cancelled in view of new independent claim 27, from which claims 8-14, 18, 19 and 26 depend.

Claim 27 recites,

A vacuum heat insulator comprising **first and second gas barrier enveloping members**, and a flat core member,

wherein each of said first and second gas barrier enveloping members comprise heat seal layers,

wherein said core member is evacuated and sealed between the first and second enveloping members utilizing said heat seal layers,

wherein the first and second enveloping members are heated and pressed to seal the entire core member between said first and second enveloping members,

wherein said first and second enveloping members are heated and fused together utilizing said heat seal layers at portions where said core member is not disposed between said first and second enveloping members, and

wherein a border region seal is formed by portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and

wherein said border region seal has a shape that corresponds to the periphery of the core member.

[Emphasis added].

This configuration is shown, for example, in FIGs. 2 and 3 of the instant specification. FIG. 3 shows a vacuum heat insulator comprising first (12a) and second (12b) gas barrier enveloping members and a flat core member (11). Each of enveloping members (12a and 12b) comprise heat seal layers and the *entire* core member (11) is evacuated and sealed between the first and second enveloping members (12a and 12b). The first and second enveloping members (12a and 12b) are shown in FIGs. 2 and 3 to be fused together along portions where no core member is between the enveloping members (13) and a border region seal is formed by the portions of the first and second enveloping member where the core member is disposed between the first and second enveloping member and the portion where the core member is not disposed. This border region seal has a shape that corresponds to the periphery of the core member (11).

Anticipation under 35 U.S.C. § 102 requires that “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim”. *In re Buszard*, 504 F.3d 1364, (Fed Cir. 2007). At a minimum, Yasuaki does not disclose a vacuum heat insulator in which **a core member is evacuated and sealed *between* the first and second enveloping members**, wherein the first and second enveloping members are heated and pressed to seal **the entire** core member between the first and second enveloping members.

Furthermore, Yasuaki does not disclose a border region seal is formed by portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein said border region seal has a shape that corresponds to the periphery of the core member**.

Rather, as shown in the cross section view in FIG. 1, Yasuaki discloses a single *continuous* outer covering 3 *around core member 2 edges*, (see, Abstract). As such, Yasuaki fails to disclose a configuration in which first and second enveloping members seal an entire core member *between* the first and second enveloping members and wherein a border region seal is formed by portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein said border region seal has a shape that corresponds to the periphery of the core member**, as recited in claim 27.

Accordingly, claim 27 is allowable over Yasuaki. Furthermore, claims 8-14, 18, 19 and 26 depend from and further define the subject matter of claim 27 and therefore are also allowable.

III. Claim Rejections Under 35 U.S.C. § 103(a)

Yasuaki in view of Motoyuki

Claims 8-10 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yasuaki in view of Motoyuki (JP 08-303686). Applicants respectfully disagree.

However, as discussed above, in reference to the rejection under 35 U.S.C. § 102(b), in an effort to expedite prosecution, independent claim 2 has been cancelled and new independent claim 27 has been added, from which claims 8-14, 18, 19 and 26 depend.

Moreover, as discussed above, Yasuaki fails to teach or suggest a vacuum heat insulator **in which the first and second enveloping members are heated and fused together utilizing the heat seal layers at portions where the core member is not disposed between the first and second enveloping members**, wherein a border region seal is formed by portions of said first

and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein said border region seal has a shape that corresponds to the periphery of the core member.**, as recited in claim 27.

Furthermore, Motoyuki fails to cure the deficiencies of Yasuaki, as Motoyuki also does not teach or suggest a vacuum heat insulator in which first and second enveloping members seal a core member and wherein a border region is formed between portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein the border region seal has a shape that corresponds to the periphery of the core member**, as recited in claim 27.

Rather, Motoyuki teaches a vacuum bag (2) into which member (1) is placed. The edges (22) of the bag (2) are sealed and do not have a shape that corresponds to the periphery of the core member (1), see FIG. 4, which shows edge portion (22) having a thin shape, whereas element (1) is thick.

Therefore, it is clear that none of the cited prior art references teach or suggest all of the elements of claim 27.

Accordingly, claim 27 is allowable. Furthermore, claims 8-14, 18, 19 and 26 depend from and further define the subject matter of claim 27 and therefore are also allowable.

Yasuaki in view of Motoyuki and further in view of Stroobants

Claim 12 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yasuaki in view of Motoyuki and further in view of Stroobants (U.S. 6,322,743). Applicants respectfully disagree. However, new independent claim 27 has been added, and recites, in

pertinent part, a vacuum heat insulator in which the first and second enveloping member are heated and fused together utilizing the heat seal layers at portions where the core member is not disposed between the first and second enveloping members, and wherein a border region seal is formed by portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein said border region seal has a shape that corresponds to the periphery of the core member..**

As discussed above, Yasuaki in view of Motoyuki fail to teach or suggest all of the elements of new independent claim 27. Furthermore, Stroobants fails to cure the deficiencies of Yasuaki in view of Motoyuki.

This is because, in contrast to the configuration recited in claim 27, Stroobants discloses, as shown in FIG. 1 and FIG. 2, insulating foam that is sealed in a flexible vessel. (See, Stroobants col. 2 lines 15-20). The insulating foam is uniform in thickness and is sealed on all sides by the flexible vessel, (see, FIG. 1 and 2). The flexible vessel covers the insulating foam and does *not* envelope any portion of the insulating member where the insulating member is not present as is recited by claim 27 and shown in FIGs. 1 and 3 of the present disclosure.

Therefore, it is clear that none of the cited prior art references teach or suggest all of the elements of claim 27.

Accordingly, claim 27 is allowable. Furthermore, claims 8-14, 18, 19 and 26 depend from and further define the subject matter of claim 27 and therefore are also allowable.

Yasuaki

Claim 19 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yasuaki. As discussed above, Yasuaki fails to teach or suggest all of the elements of

independent claim 27. This is at least because Yasuaki fails to disclose a configuration in which first and second enveloping member seal a core member and wherein a border region seal is formed by portions of said first and second enveloping members where said core member is disposed between the two enveloping members and portions where the core member is not disposed between first and second enveloping members, and **wherein said border region seal has a shape that corresponds to the periphery of the core member..**

Rather, as shown in the cross section view in FIG. 1, Yasuaki discloses a continuous outer covering 3 *around the edges* of member 2 and not between first and second enveloping members, as recited in claim 27.

Therefore, it is clear that Yasuaki does not teach or suggest all of the elements of claim 27.

Accordingly, claim 27 is allowable. Furthermore, claims 8-14, 18, 19 and 26 depend from and further define the subject matter of claim 27 and therefore are also allowable.

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

Application No.: 10/537,298

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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